Attorney Docket No. SEM-0010

Clean Copy of Substitute Specification

## DESCRIPTION

## CHARGER AND DC-DC CONVERTER

## TECHNICAL FIELD

[0001] The present invention relates to a charger that obtains electric power necessary for a fuel cell and to a DC-DC converter.

## BACKGROUND ART

Figs. 12 and 13 show a DC-DC converter having a [0002] charging function in which a cell, such as a conventional fuel cell or solar cell is used as an input source, and a load Ro and a secondary cell B are connected in parallel to an output end of the DC-DC converter. The DC-DC converter having a charger shown in Fig. 12 has means for controlling an input voltage, which is lowered due to output impedance when electric power is supplied, so as to become constant, thereby realizing constant input of electric power in which when an input supply power Pin is smaller than an output supply power Pout, the input voltage becomes constant, and an output voltage becomes a dropping state, and means for controlling the output voltage so as to become constant, in which when the input supply power Pin is larger than the output supply power Pout, the input voltage increases, example, see to Patent Document 1 for the solar cell).